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GEO/RFS–PN–5

Geotech

Rocky Flats Plant

Project Management Plan for Phase I–B, 881 Hillside Interim Remedial Action

August 1990

Work performed under
DOE Contract No
DE–AC07–86ID12584 for the
U S Department of Energy

Grand Junction
Projects Office

Rocky Flats Plant

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Work Performed Under DOE Contract DE–AC07–86ID12584
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Prepared for
Geotech
P O Box 14000
Crand Junction, Colorado 81502–5504

Contents

Figures

Tables

1.0 Project Summary

This Project Management Plan for Phase I–B Interim Remedial Action at the 881 Hillside Area of the Rocky Flats Plant (RFP) Golden, Colorado was prepared under an approved Memorandum of Understanding (MOU) between EG&G Rocky Flats Inc. and Geotech dated May 22 1990 Geotech is the operating contractor for the U S Department of Energy Grand Junction, Colorado Projects Office (DOE/GJPO) Under this Memorandum of Understanding Geotech provides technical operational and other services as requested by EG&G These services to assist in environmental restoration activities at the Rocky Flats Plant are consistent with Agreement No DE–GM13–89G30007 with the Department of Energy Rocky Flats Office (DOE/RFO) and the Department of Energy Idaho Operations Office (DOE/ID) The services are performed according to individual Task Orders negotiated between EG&G and Geotech. Geotech performs work authorized by EG&G via Task Orders each Task Order when issued and accepted by Geotech, incorporates the terms of the Memorandum of Understanding

The Rocky Flats Plant, operated by EG&G Rocky Flats Inc. (EG&G) is a government-owned contractor-operated facility that began operations in 1951 The Rocky Flats Plant is part of the U S Department of Energy s nationwide nuclear weapons research, development, and production complex In the past, both storage and disposal of hazardous and radioactive wastes occurred at on site locations at the Rocky Flats Plant. Some of these locations, including the 881 Hillside Area, are identified as potential sources of environmental contamination because of the known or suspected soil or groundwater contamination by volatile organic compounds radioactive elements heavy metals and/or other inorganic compounds The 881 Hillside Area, is designated as Operable Unit I and includes 12 solid waste management units (SWMUs)

The *Draft Final Remedial Investigation Report for High Priority Sites* (Rockwell International, 1988)presented the results of the investigation of the solid waste management units The Remedial Investigation identified organic contamination and possible inorganic contamination in alluvial groundwater at the 881 Hillside Area.

The DOE/RFO initiated a multiphased Interim Measures/Interim Response Action (IM/IRA) at the 881 Hillside Area to minimize the release of hazardous substances The IM/IRA includes the design and construction of a groundwater interceptor trench and a treatment plant for the removal of the hazardous substances from the groundwater prior to its release or reuse

The Interim Response Action construction required for Phase I–B includes

- Erection of a pre-engineering building (Building 891) on a foundation constructed during Phase I–A
- Construction of influent tank foundations and containment structure
- Erection of influent tanks
- Construction of water supply and sewer lines for connection of Building 891 to existing RFP utility lines
- Installation of a natural gas line to Building 891
- Installation of electric service to Building 891

- Installation of telephone service to Building 891
- Installation of heating ventilation, air condition, and plumbing in Building 891
- Installation of Building 891 electrical equipment that includes wiring lighting, fixtures building control panel and mechanical equipment power hookup
- Construction of an office/utility room and washroom within Building 891

This Project Management Plan is prepared under the guidelines of DOE Order 4700 1, Project Management System Chapter II Attachment II–5 and is intended to define the project scope major milestones project costs and schedules organizational structure reporting and review process and key project personnel. The Project Management Plan will be revised when significant changes occur

2 0 Project Milestones

The completion of major elements of work for Phase I–B 881 Hillside Area Interim Response Action are established as milestones The milestones generally consider the time-phasing and the relationship of the different tasks and serve as a basic management tool for monitoring project progress Table 1 presents the discrete milestones that correspond to defined portions of the project schedule and the organization responsible for completion of the milestone The detailed project schedule is addressed in Section 4 Figure 2

Table 1 Discrete Milestones for the Phase I–B 881 Hillside Area IRA

Milestone	Responsible Party	Date
Issue Task Order	EG&G	April 23 1990
Prepare Health and Safety Plan	Geotech	Complete May 7 1990
Prepare Quality Assurance Program Plan	Geotech	Complete May 7 1990
Prepare Project Management Plan	Geotech	Complete August 1990
Procure Construction Subcontractor	Geotech	Complete June 22 1990
Initiate Phase I–B IRA	Geotech	September 17 1990
Complete Phase I–B IRA	Geotech	January 14 1991

3 0 Work Breakdown Structure

Figure 1 presents the Work Breakdown Structure (WBS) for Geotech s portion of the 881 Hillside Area Interim Remedial Action. The WBS is divided into three major work scope activities Program Management; Construction Management, and Health, Safety and Security The following sections describe these functional activities

3 1 Program Management

The Program Manager is the primary contact with EG&G and the DOE for reporting all progress on Rocky Flats Plant environmental restoration projects involving the DOE/GJPO and Geotech The Program

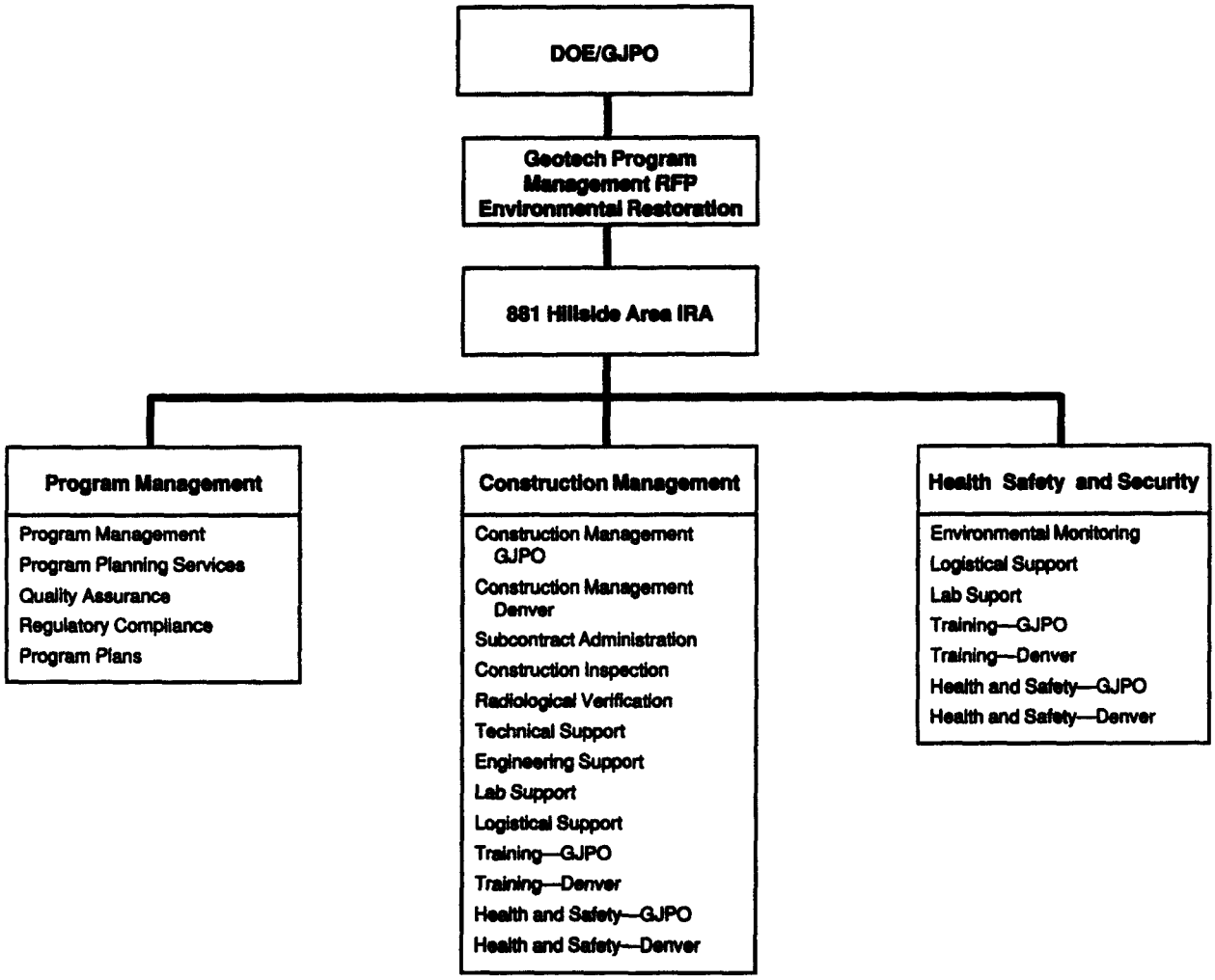

Figure 1 Work Breakdown Structure

Manager establishes and controls project activities within the Geotech organization to ensure quality planning execution, and delivery of project related products. Additional responsibilities of the Program Manager include communicating DOE Directives or alterations of project scope and work statements to Geotech Project Management, Engineering and other support organizations The Program Manager directs all project cost account planning under a DOE validated Cost Schedule Control System (CSCS) and serves as liaison with the DOE/RFO DOE/GJPO and EG&G The Program Manager is responsible for preparing program and project plans and also ensures that Geotech s work receives quality assurance audits and surveillances that comply with appropriate regulatory requirements

The Geotech work at the Rocky Flats Plant is performed under the day to-day direction of the Geotech Project Manager according to the construction project schedule All work is performed under applicable health and safety requirements and in compliance with the *881 Phase I–B Health and Safety Plan*

3 2 Project Management

Project Management is responsible for implementing all project activities including monitoring the procurement of subcontractors and management of the Phase I–B construction All Geotech-directed construction activities are conducted in accordance with EG&G provided engineering drawings and Geotech specifications and Statements of Work.

3 3 Health, Safety, and Security

Geotech is committed to the accomplishment of remedial action work under conditions that pose no significant hazard to the health, safety and well being of persons affected by remedial action whether Geotech personnel, subcontractor personnel, or the general public The Geotech Health Safety and Security (HS&S) organization establishes programs and monitors HS&S requirements as outlined in the *881 Phase I–B Health and Safety Plan*

4 0 Project Schedule

The project schedule for the 881 Hillside Area IRA is shown in Figure 2 Depicted are the major project milestones the estimated duration of the milestone activates and the time phased relationship among the milestones

5 0 Project Budget

The detailed budget for the Phase I–B IRA is part of the Task Order Statement of Work.

6 0 Key Personnel Responsibilities

Geotech performs its portion of the work for the Phase I–B Interim Remedial Action under the Memorandum of Understanding between Geotech and EG&G Figure 3 presents the Geotech functional organization structure and Figure 4 illustrates the Geotech program management system for remedial action work. Geotech uses a Program Manager/Project Manager approach to remedial action work.

The Program Manager the primary contact with the DOE, assumes overall responsibility for the success of program activities The Program Manager in conjunction with DOE/GJPO determines the scope and schedule of activities measures program progress monitors the budget, evaluates program performance and reports to the DOE and EG&G

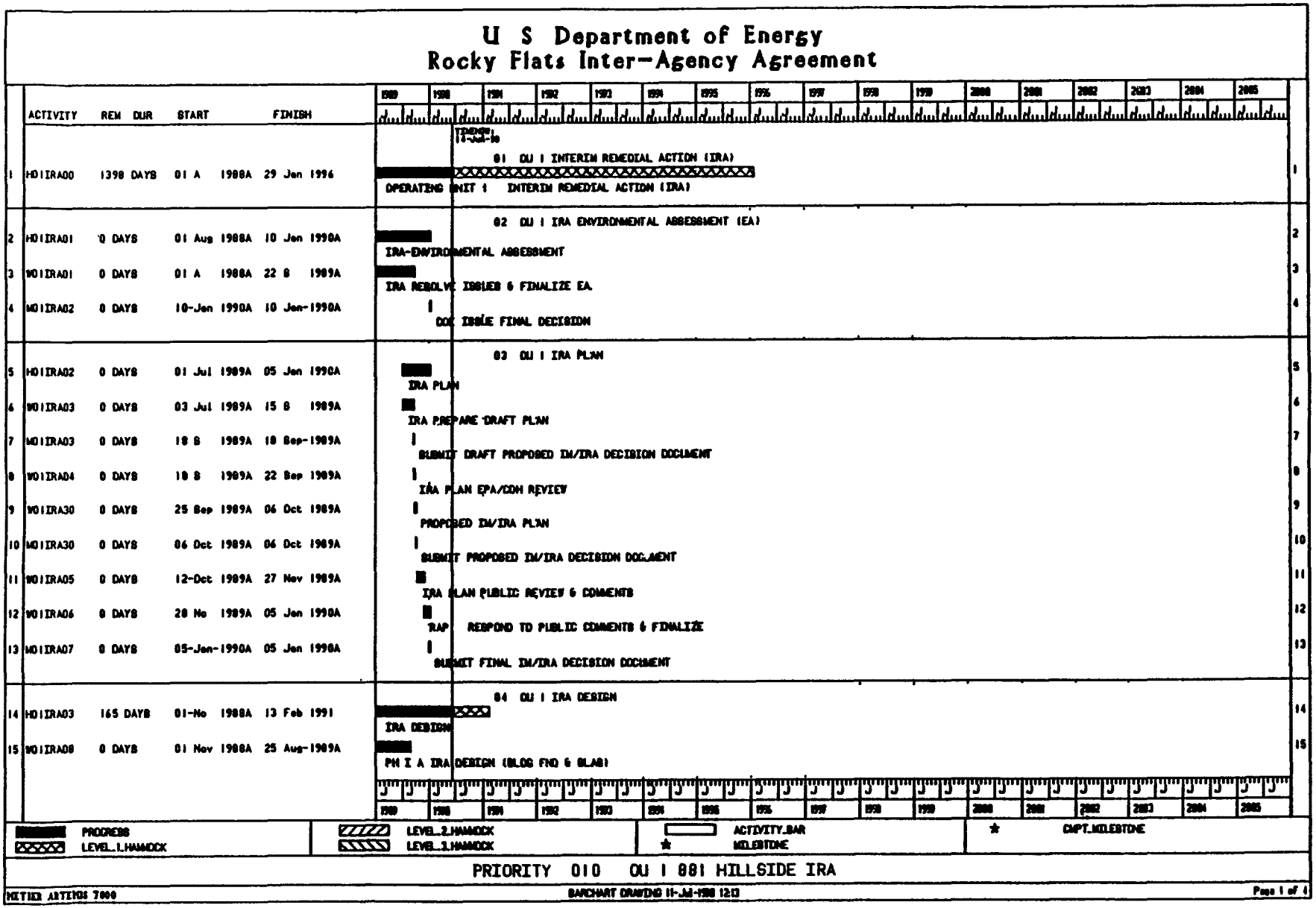

Figure 2 Project Schedule

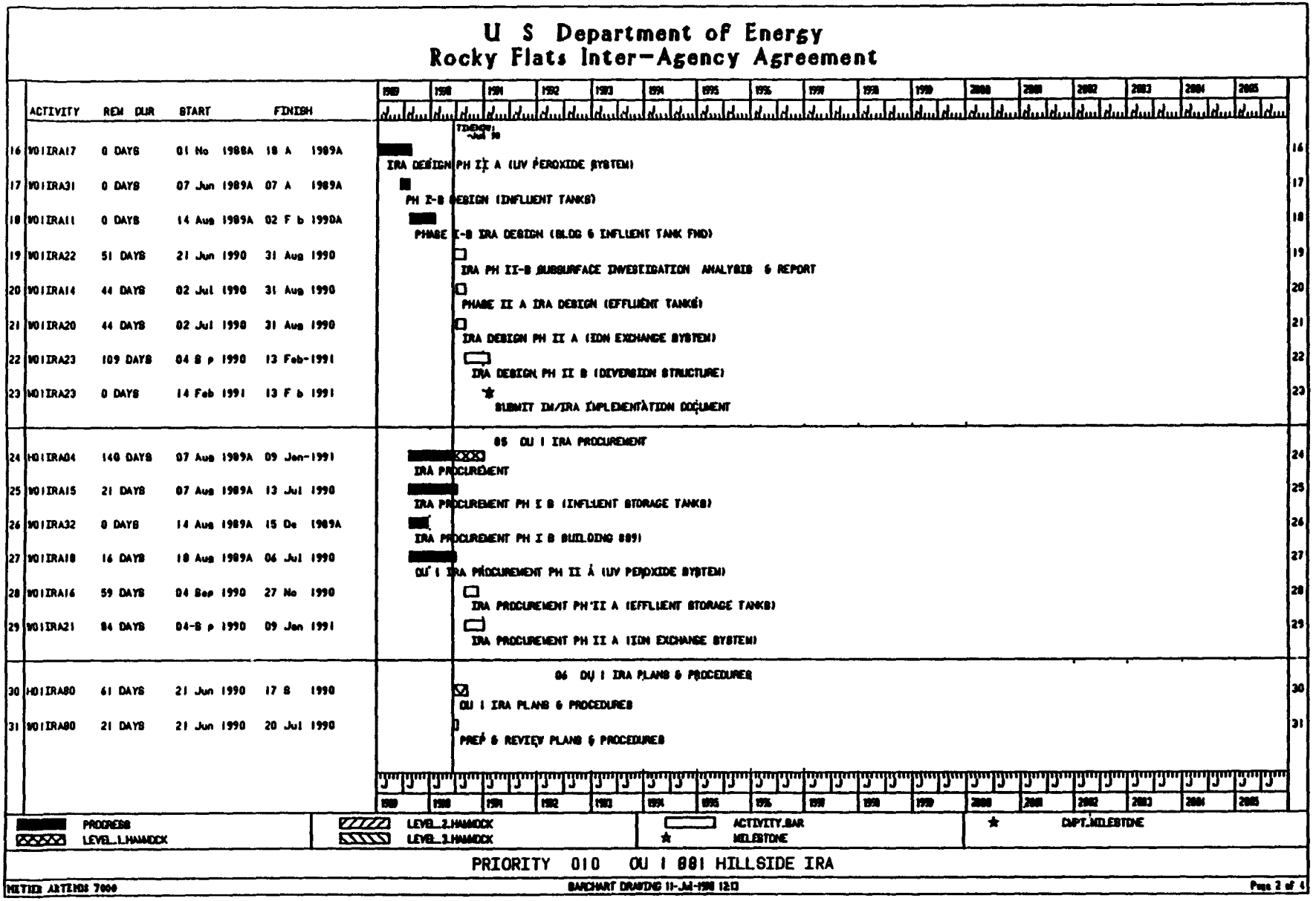

Figure 2 (continued) Project Schedule

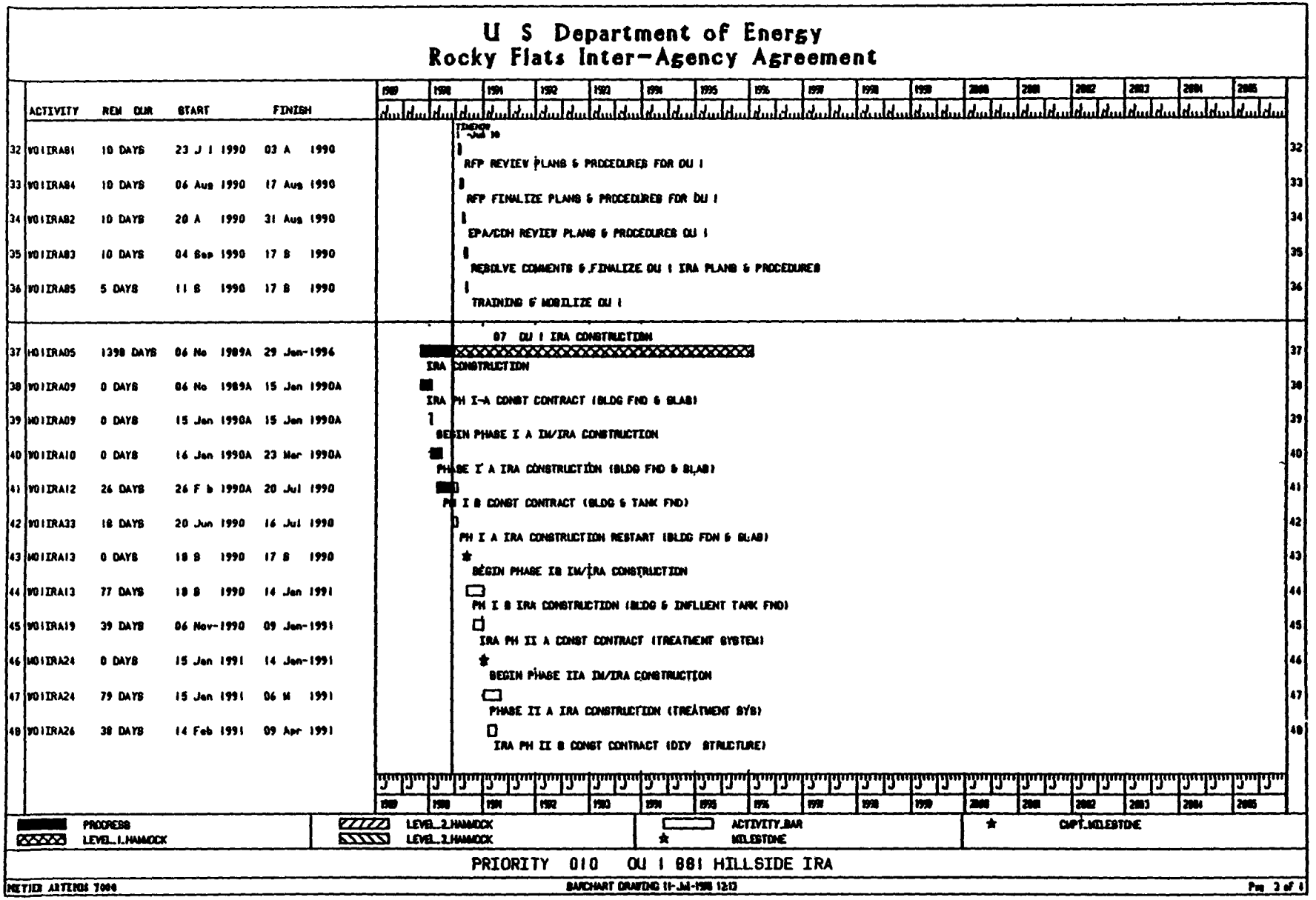

Figure 2 (continued) Project Schedule

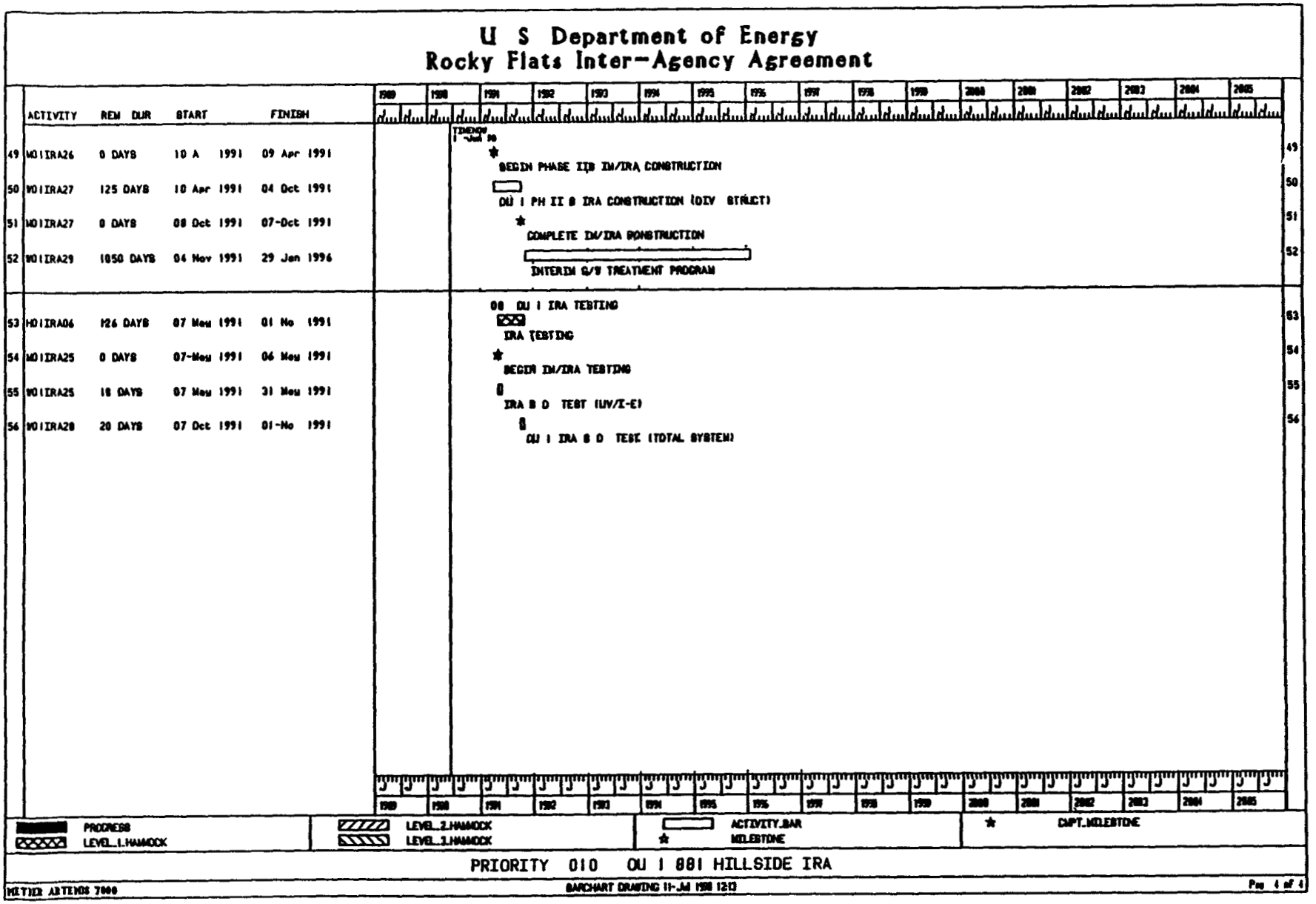

Figure 2 (continued) Project Schedule

Geotech

Organization Chart

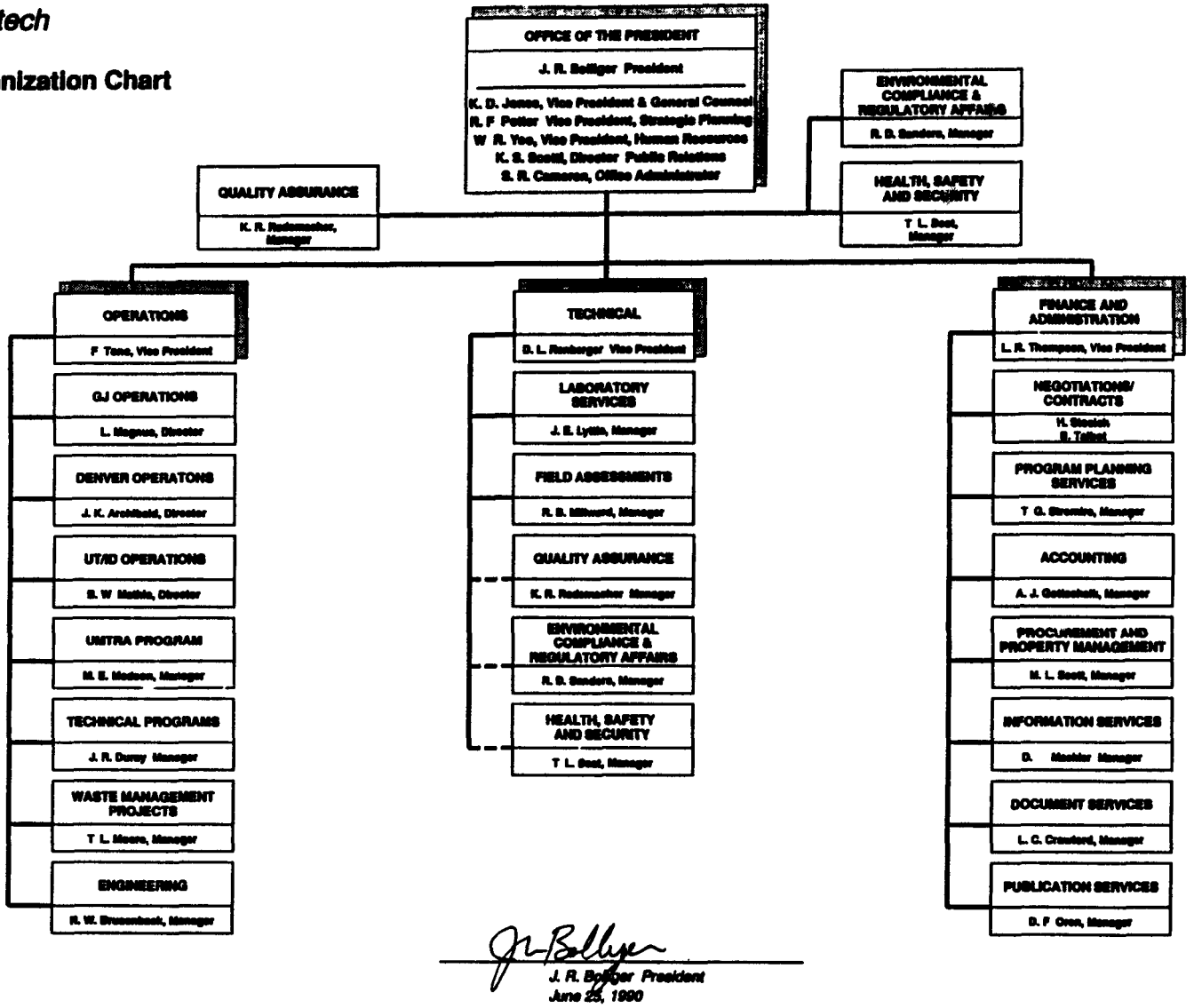

Figure 3 Geotech Functional Organization Structure

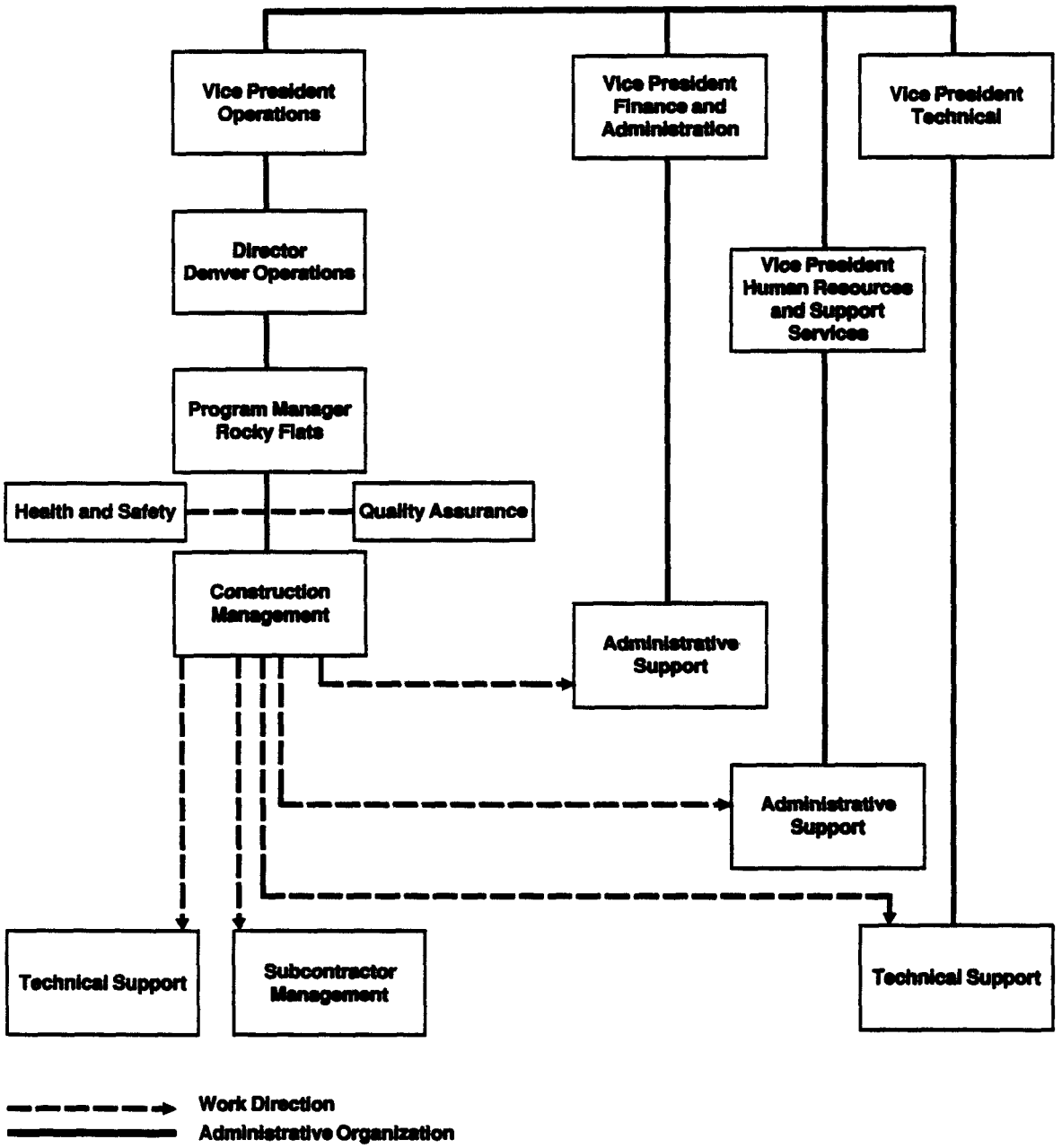

Figure 4 Geotech Program Management System

The Program Manager implements remedial action through the Project Manager Following approval of scope schedule and costs by the Program Manager the Project Manager manages remedial action work that may include characterization, remedial design, remedial action, and closeout.

As dictated by project requirements the Project Manager assigns remedial action work to other Geotech functional organizations that possess the expertise to perform the activities or subcontracts the work to outside organizations Table 2 presents key Geotech personnel for the 881 Hillside Area IRA

Table 2 Key Personnel for the Phase I–B 881 Hillside Area IRA

Name	Responsibility
James K Archibald	Director Denver Operations
Carl L. Jacobson	Program Manager (Acting)
Charles A. Broom	Site Manager Denver Regional Office
David L. Clayburn	Project Manager
Richard B Millward	Manager Field Assessments
Robert D Rowlands	Manager Design Group/Engineering
Travis L Best	Manager Health Safety and Security
Keith R Rademacher	Manager Quality Assurance
Breke J Harnagel	Subcontract Administrator Procurement Manager

7 0 Project Communications

The MOU between Geotech and EG&G outlines the responsibilities of each organization and specifies the mechanism that directs Geotech to perform work on environmental restoration projects at the Rocky Flats Plant. The Memorandum of Understanding is incorporated in this Project Management Plan and is included as Appendix A

8 0 Reporting and Review Process

Progress and cost reporting of Geotech activities relating to the Phase I–B Interim Remedial Action are the ultimate responsibility of the Geotech Program Manager However each Geotech performing organization has a responsibility to track its progress and costs. All cost and schedule reporting are in accordance with the requirements of DOE Order 2250 1C Reporting requirements are both external and internal

External reporting requirements include but are not limited to

- **Formal Reports to EG&G**—All reports to EG&G are prepared and distributed as stated in the MOU and in the Phase I–B IRA Statement of Work.

- **Formal Monthly Reports to DOE/GJPO**—Written reports conveying specific information relative to performance against cost and milestone plans are prepared by the Program Manager The report will summarize progress for the month, explain cost or schedule variances and describe corrective actions to be taken. Cost information will be reported on the basis of the WBS in terms of

Budgeted Cost for Work Performed (BCWP) Actual Cost of Work Performed (ACWP) and Budgeted Cost of Work Scheduled (BCWS)—figures that reflect the earned value of completed work on a monthly basis The monthly report will include the following documents *Cost Performance Report Work Breakdown Structure* (DOE Format 1) *Cost Performance Report Baseline* (DOE Format 3) milestone schedule and status report, and a *Contract Management Summary Report* (DOE Format 5) on the project activity In addition, the report will update the status of Quality Assurance audits and surveillances project plans and procedures and software verification/validation.

- **Semiannual DOE/GJPO Program Reviews**—Reviews are conducted semiannually at the request of DOE with a focus on cost and schedule performance Presentations cover past project progress present activity and future plans Items addressed include all pertinent programmatic issues as well as recommended changes to the program

- **Weekly Progress Reports to DOE/GJPO**—Reports are issued covering Geotech s progress problem areas, and plans for the Phase I–B Interim Remedial Action activity These written reports are supplemented by regular Geotech management meetings.

Internal Geotech reporting requirements include but are not limited to

- **Weekly Report to Program Manager**—Written reports are prepared by Geotech functional managers for the Program Manager and specify status problem areas and plans

- **Internal Cost Performance Report**—A report is prepared monthly by Program Planning Services

- **Cost Account Variance Analysis Report**—A report is prepared monthly by Cost Account Mangers

- **President's Monthly Review of Project Status**—Cost and schedule presentations are made to the Geotech President on a monthly basis by the Program Manager

9 0 Project Change Control

Geotech has an established Change Control Board that directs the orderly handling of the program changes initiated by EG&G The Change Control Board will administer all significant changes to the project. All EG&G initiated changes whether within or outside the project scope of work are classified into three change categories Type I Type II or Type III

Type I Changes Program Revision

Type I changes to the program are authorized by the DOE/GJPO A Type I change involves modification to the funding guidance budget or schedule baseline or technical work scope Any modification to these principal baseline elements requires concurrence and approval by the DOE/GJPO and EG&G A Type I change also involves any use of management reserve in excess of the authorized threshold of $100 000 If the scope or budget is modified the Type I change also requires a modification to the contract budget base

It is the intent of the Geotech administered CSCS that all DOE authorized Type I changes are incorporated into the Performance Measurement Baseline (PMB) as quickly as possible normally within the first full accounting period following the authorization. The documentation for incorporating

authorized changes includes listing the change in the Change Control Log and revising the Cost Account Authorizations (CAAs) and Cost Account Plans (CAPs)

Type II Changes Technical Revisions

A Type II change involves changing the PMB scope schedule or budget baselines as defined by the limits established in the CCB Charter If the change requires additional budget and the requirements are within the Geotech level of administrative control a budget transfer is made without DOE concurrence by the Program Manager or the CCB If the change requires budget or funds in excess of Geotech authorization (over $100 000) the change is reclassified as a Type I change and is processed accordingly As with Type I changes Type II changes are carefully controlled to avoid distortion of the performance measurement. Approved changes are recorded in the CAAs CAPs and logs in the same manner as Type I changes

Type III Changes

Type III changes are modifications to existing budget, schedule or work scope baselines that do not affect the project baseline parameters These types of changes are made for clarification of records only

10 0 Personnel Changes

If key personnel changes are made the effect of the change on the project deliverable dates and quality will be assessed by the Program Manager If a significant impact on the project is anticipated the Program Manager quantifies the impacts and notifies EG&G and the DOE

11 0 Reference

Rockwell International, 1988 *Draft Final Remedial Investigation Report for High Priority Sites*

Appendix A
Memorandum of Understanding Between EG&G and Geotech

United States Government | Department of Energy

memorandum

Idaho Operations Office

DATE: May 22, 1990

SUBJECT: Memorandum of Understanding Between EG&G and UNC

TO: Robert H Nelson Jr , Manager
DOE-RFO

Attached are four original sets of the Memorandum of Understanding (MOU) between EG&G Rocky Flats Inc and UNC Geotech Inc which I have signed This MOU documents the relationships between DOE, EG&G, and UNC for environmental restoration activitives and other services at the Rocky Flats Plant by UNC

If you would like to discuss this agreement further please call Michael Tucker Manager of the Grand Junction Projects Office on FTS 326-6001

A A Pitrolo
Manager

Attachments

MEMORANDUM OF UNDERSTANDING
BETWEEN
EG&G - ROCKY FLATS INC
AND
UNC GEOTECH INC

I PURPOSE

This Memorandum of Understanding (MOU) implements the relationship between EG&G-Rocky Flats, Inc (EG&G) as prime contractor to the U S Department of Energy, Rocky Flats Office (DOE-RFO) and UNC Geotech Inc (UNC) as p ime contractor to the U S Department of Energy, Idaho Operations Office (DOE-ID) at the Grand Junction Projects Office (DOE-GJPO) under which the definition planning engineering characterization technical oversight construction management operations and laboratory services for environmental restoration activities and other services at the Rocky Flats Plant by UNC will be accomplished pursuant to the Environmental Restoration Programmatic Agreement between DOE-RFO and DOE-ID (Agreement Number DE-GM13-89GJ30007) This MOU will define the method by which projects are assigned and task orders placed and funded and will establish the structure of the management interface between EG&G and UNC This MOU does not abrogate any responsibility of the DOE-RFO nor EG&G for remedial action at the Rocky Flats Plant or the management thereof EG&G s liability under this MOU shall be limited to costs which are allowable under its prime contract number DE-AC04-90DP62349 with the Department of Energy

II SCOPE

Support to be provided consists of technical operational and other services as requested by EG&G and consistent with DOE-RFO and DOE-ID Agreement Number DE-GM13-89GJ30007 to assist in environmental restoration activities related to the Rocky Flats Office Such services shall be performed on individual task orders to be negotiated between EG&G and UNC UNC shall perform such work as EG&G may from time to time authorize on task orders each of which when issued hereunder and accepted by UNC shall incorporate the terms of the MOU Such task orders will describe the work to be accomplished list certain constraints the equipment if any to be supplied by EG&G the completion schedule and compensation UNC will perform the work under this MOU as a Response Action Contractor to the extent that such work is covered by the Comprehensive Environmental Response Compensation and Liability Act of 1980 as amended

III RESPONSIBILITIES AND AUTHORITIES

A EG&G is responsible for

1 Identifying environmental restoration projects to be supported through task orders to UNC through the U S Department of Energy Grand Junction Projects Office (DOE-GJPO)

2 Providing annual projections of environmental restoration projects to be accomplished by UNC for the subsequent 12 and 24 month periods

3 Defining the scope of work and approving baseline schedules and cost estimates for work assigned to UNC

4 Approving changes to the baseline schedules and project budgets

5 Setting priorities and providing technical direction for project task orders assigned to UNC

6 Managing the quality of UNC work through formal reporting informal controls and monthly reviews of work and charges to the task orders Authority to include ability to terminate the task order and/or this MOU

7 Reviewing and approving Program Management Quality Assurance and Health & Safety plans and other relevant plans for work as submitted by UNC

8 Together with the DOE-RFO obtaining in a t mely manner all necessary permits licenses and agreements as required by federal state and local laws or regulations for the task order projects to be performed by UNC

9 The operation and maintenance of DOE-RFO owned facilities utilized by UNC, except those specifically assigned to and accepted by UNC through task orders for operating and/or maintaining

10 Providing coordination and direction to UNC for compliance with Rocky Flats procedures pertaining to on-site construction including construction permits safety inspections technical inspections personnel training and indoctrination, waste handling, non-conformance resolution utility outages testing and any other related procedures

B UNC is responsible for:

1 Providing engineering characterization construction management operational laboratory services and other project management and

technical support services required under project task orders assigned to UNC through DOE-GJPO under DOE Contract No DE-AC07-86ID12584 Such services could include but are not limited to: Collection and analysis of samples preparation and review of designs and other documents preparation of project plans; providing Construction Management including procurement and subcontract administration operating and maintaining facilities and public relations support

2 Providing baseline project schedules and cost estimates to EG&G for specific task orders pursuant to Section IV 3 of this MOU

3 In response to EG&G initiated changes submitting revised baseline schedules and budgets through DOE-GJPO with appropriate justification and pursuant to the UNC cost and schedule control system, to EG&G for approval

4 Performing the work in accordance with the Task Order Statement of Work

5 Preparing as appropriate for submittal by EG&G and/or DOE-RFO, all necessary permits licenses and agreements as required by federal state and local laws or regulations for the task order projects to be performed by UNC (See Section III A 8)

6 Maintaining cost and schedule control using a U S Department of Energy validated cost/schedule control system

UNC will propose a schedule to accomplish the work The schedule will incorporate performance and cost measurement data in a format which has been approved by DOE-GJPO UNC will provide an updated performance/cost schedule at intervals to be established by EG&G for each task order, to EG&G as a part of the progress report for that period The progress report will also detail progress on the project as well as identify work to be performed over the next period Problems/issues that have arisen or are anticipated to arise should be detailed in these reports

Cost and schedule control system reporting, upon approval by DOE-GJPO will be included in monthly reports from UNC to EG&G and will be subject to EG&G approval EG&G may issue "Stop Work Orders' if EG&G determines that cost/schedule performance is out of compliance with task order work breakdown structure (WBS) requirements UNC will allow no further charges to be made on a task order for which EG&G has issued a Stop Work Order

3

7 Providing monthly project status and cost reports to EG&G Reporting control systems for specific task orders are to be approved by EG&G

8 Notifying EG&G, through DOE-GJPO promptly of any proposed task order determined to be unacceptable pursuant to Section IV 2 of this agreement

9 Coordinating terms of their subcontracting and procurement with Mr Larry Ferris of EG&G s Labor Relations Department or his designee UNC may not engage in any labor practices which are inconsistent with those established by EG&G

IV MECHANISM FOR ASSIGNMENT OF PROJECTS PLACEMENT OF PROJECT TASK ORDERS, AND PROVIDING ANNUAL PROJECTIONS

1 The EG&G Program Manager shall define the scope of work and desired schedule for projects to be performed under task orders to DOE-GJPO The EG&G Program Manager shall transmit this Support Request to the UNC Program Manager with a copy to the DOE-GJPO and DOE-RFO Single Points of Contact The EG&G and UNC Program Managers and the DOE-GJPO and DOE-RFO Single Points of Contact are defined as per DOE Agreement No DE-GM13-89GJ30007

2 The UNC Program Manager will review the support request and determine if it is within the capabilities of and consistent with DOE Prime Contract No DE-AC07-86ID12584 as approved by DOE-GJPO and if not will provide prompt notification through DOE-GJPO to EG&G

3 If it is decided that UNC can perform the project tasks, as determined in Section IV 2 UNC will prepare a Task Order Statement of Work Cost Estimate and Baseline Schedule to be submitted to EG&G upon review and approval by DOE-GJPO for EG&G review and approval

4 Upon notification by EG&G that the project Task Order Statement of Work, Cost Estimate and Baseline Schedule have been approved DOE-GJPO shall notify DOE-RFO that the Task Order has been accepted and request DOE-RFO to transfer funding to the U S Department of Energy Idaho Operations Office (DOE-ID) for inclusion in the DOE-GJPO Funding Program Plan

5 All material changes to the approved Task Order Statement of Work, Cost Estimate and Baseline Schedule shall be identified by UNC pursuant to the UNC DOE validated cost and schedule control system, and transmitted with DOE-GJPO approval to EG&G for approval

6 EG&G shall prepare annual projections of environmental restoration projects to be accomplished by UNC for the subsequent 12 and 24 month periods and provide these projections to UNC, through DOE-GJPO within 60 days of the date of this MOU for Government FY-90 and by July 15th each year for the subsequent Government FY

V. TERM AND MODIFICATION OF MEMORANDUM OF UNDERSTANDING

This MOU takes effect upon signature by all parties and shall remain in effect unless terminated by written notice by either party This MOU may not be modified except with the written consent of the parties and approval of DOE-RFO and DOE-ID

Agreed upon by

J M LEASH ASSOCIATE GENERAL MANAGER EG&G Rocky Flats

Date:

John R Bollifer President UNC Geotech Inc

Date: 3/16/90

Acknowledged and Approved by,

4/6/90 U S Department of Energy Rocky Flats Office

Date

Date 3/22/90 U S Department of Energy, Idaho Operations Office

5